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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,193	11/04/2003	Osamu Kurosawa	8305-234US (NP61-0002-1)	6237
570 7590 01/03/2011 PANITCH SCHWARZE BELISARIO & NADEL LLP ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			EXAMINER LANG, AMY T	
			ART UNIT 3731	PAPER NUMBER
			NOTIFICATION DATE 01/03/2011	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptomail@panitchlaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/701,193	KUROSAWA ET AL.	
	Examiner	Art Unit	
	AMY LANG	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/15/2010 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cain (US 2003/0000866 A1) in view of Chambard et al. (US 2002/0082176 A1), Komiya et al. (US 2001/0044389 A1), and Sung et al. (US 4,169,799).

Cain discloses a lubricating oil for transmissions comprising a mineral base oil having a kinematic viscosity from about 3.0 to about 7.5 cSt at 100 °C ([0019]; [022]). The composition further comprises a phosphorus compound including trialkylphosphites ([0147]). These compounds are present in the composition from about 0.1wt% to about 10wt% so that the amount of phosphorus based on the total mass of the composition clearly overlaps the instantly claimed range ([0099]). Cain also teaches a polymethacrylate viscosity index improver having a molecular weight from about 800 to about 6000 ([0029]). These viscosity index improvers are added to the composition from about 3wt% to about 40wt% which is a sufficient amount to raise the kinematic viscosity of the composition to about 5.0 to 6.0 mm²/s at 100 °C, absent evidence to the contrary.

Cain discloses a sulfur-containing compound in an amount so that sulfur is present from 0.05 to 0.14 percent by mass based on the total composition since the sulfur compound is present from 0.05 to 10 wt% or from 0.001 to 5 wt% ([0056]; [0197]). However, Cain teaches the sulfur-containing compound as a dithiocarbamate antiwear agent ([0056]).

Chambard et al. teaches that both thiadiazoles and dithiocarbamates are well known antiwear agents that may be substituted for each other ([0061]). Therefore, it also would have been obvious at the time of the invention to one of ordinary skill in the

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art for Cain to use a thiadiazole for the antiwear agent in view of Chambard et al. Additionally, the instant specification does not provide criticality for having a thiadiazole over a dithiocarbamate so that it is the Examiner's position that substituting the dithiocarbamate of Cain for a thiadiazole would have been obvious at the time of the invention.

Although Cain teaches the lubricating oil as mineral oil, specifically paraffinic oil, Cain does not specifically disclose the %Cp of the oil ([0021])

Komiya et al. (hereinafter Komiya) discloses a lubricating composition comprised of mineral oil, including paraffinic oils ([0002], 0012], [0016]). The disclosed mineral oil has a kinematic viscosity of 1 to 4 mm²/s, which clearly overlaps the instant claims ([0014]). Additionally, the % Cp of the oil is disclosed as 70 or higher as defined by ASTM D 3238 ([0012]). It is the examiner's position that the transmission oils disclosed by Cain and Komiya both contain similar mineral oils, paraffinic oils at the same viscosity, and would therefore display the same characteristics. Komiya specifically uses mineral oil with a % Cp from 75 to 81 since base oil in this range of % Cp displays excellent low temperature fluidity (Table 1, page 8, [0013]). Therefore, it would have been obvious to one of ordinary skill at the time of the invention for the transmission disclosed by Cain to comprise a base mineral oil having a % Cp from 75-81 for the advantages of enhanced low temperature fluidity as taught by Komiya.

Although Cain teaches the use of other additives, including detergents, Cain does not specifically disclose a calcium sulfonate detergent ([0217]).

Sung et al. (hereinafter Sung) teaches that calcium sulfonates are well known in the art as detergents for use in lubricating compositions (column 9, lines 48-49).

Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art for Cain to also utilize a calcium sulfonate for the disclosed detergent.

Response to Arguments

5. Applicant's arguments filed 09/15/2010 have been fully considered but they are not persuasive. Applicant first argues that Cain teaches a preferred amount of phosphorus from 0.05 to 4%, 0.08 to 3%, and 0.1 to 2% so that one skilled in the art selecting an appropriate phosphorus based on Cain would have been motivated to select one of these preferred amounts, and not the claimed range. However, Cain still discloses the broader range from about 0.01 to about 10% so that Cain anticipates the claimed range. Based on this teaching of Cain, one skilled in the art would be aware of this broader range.

Applicant next argues that the claimed phosphorus range has unexpected results compared to using a phosphorus amount outside this range based on the table on page 7 of the remarks. However, such is not found persuasive since Cain also teaches the claimed range. Furthermore, Reference Example 1 comprises phosphorus outside the claimed range (0.04wt%) but yet has the same friction coefficient after 2500 cycles in the SAE No. 2. test and the same last non-seizure load.

Last, Applicant argues that Cain teaches the preferred amount of sulfur from 0.05 to 5% or 2 to 6% so that one skilled in the art selecting an appropriate sulfur based on

Cain would have been motivated to select one of these preferred amounts, and not the claimed range. However, these amounts represent the amount of antiwear agents or antioxidants and not the specific sulfur content, so that, for example, a composition comprising 0.05 wt% of a sulfur antiwear agent would comprise even less sulfur. Furthermore, Cain still discloses the broader ranges from about 0.05 to about 10% and about 0.001 to about 10% so that Cain anticipates the claimed range. Based on this teaching of Cain, one skilled in the art would be aware of these broader ranges.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMY LANG whose telephone number is (571)272-9057. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/28/2010
/AMY LANG/
Examiner, Art Unit 3731